

Current Park Operations

This business plan differentiates between two types of expenditures: Operations & Maintenance, and Investments. Operations & Maintenance requirements are those funds needed to carry out everyday operations at a park unit. Some examples include annual payroll costs, janitorial operations, and managing a telecommunications network.

On the other hand, investments are significant one-time costs that parks incur in order to fix current problems or provide for future park development. Investments may include projects such as a resource inventory necessary to establish a credible baseline before beginning a monitoring program or constructing a new building. This section of the plan focuses on the Operations & Maintenance activities of the park. In order to describe park operations for this business plan, park activities were divided into five functional areas, which describe the five areas of business for which the park is responsible. The five functional areas are:

- Resource Protection
- Visitor Experience & Enjoyment
- Facility Operations
- Maintenance
- Management & Administration

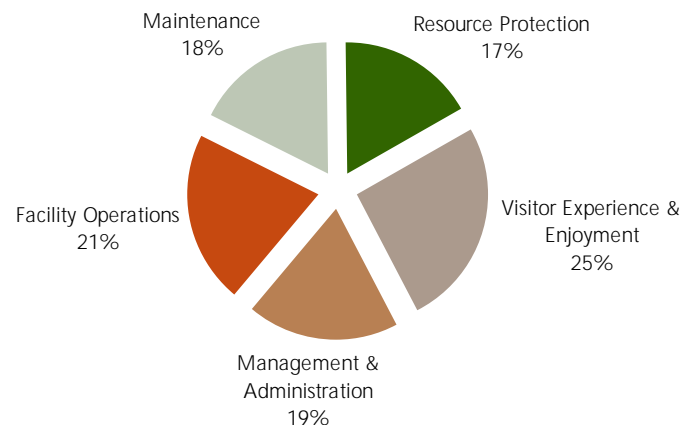
These are further broken down into 35 programs that more precisely describe park operations. Programs are general in order to cover a broad suite of activities that should be occurring in the park.

The next component of the business planning process is the completion of a detail sheet for each program. These forms describe the day-to-day activities occurring in the park and the totality of financial need associated with them.

Statements of work are developed to describe the suite of activities encompassed by the program. Then operational standards are generated to describe the duties and responsibilities required to meet the critical functions of the program as stated in the statement of work. These standards are then used to determine the total financial resources required to perform the standard tasks of the program. The final step is to compare current park activities to the operational standards to identify the gaps between required and available resources.

The following pages discuss each of the functional areas in detail.

FY03 Expenditures by Functional Area



Resource Protection: encompasses all activities related to the management, preservation and protection of the park's cultural and natural resources. Activities include research, restoration efforts, species-specific management programs, wildland fire management, archives and collections management, historic site protection, and information integration activities.

Visitor Experience & Enjoyment: includes all park activities directly related to providing visitors with a safe and educational experience while at the park. It includes all interpretation, visitor center management, interpretive media, in-park concessions management, fee collection, and visitor safety services.

Facility Operations: includes all activities required to manage and operate the park's infrastructure on a daily basis. Buildings, roads, trails, utilities, and campgrounds require a range of operational activities from basic sanitation to snow plowing to water testing.

Maintenance: includes activities directed solely to prolonging the life of park assets and infrastructure through substantial repair, replacement or rehabilitation of park assets, such as buildings, roads, trails, utilities, fleet vehicles, and equipment.

Management & Administration: encompasses all parkwide management and administrative support activities. It includes all park communications and external affairs activities, park level planning, human resource management, information technology, park leadership, and financial management.

Resource Protection



Employees in the Natural Resources Management Division monitor water quality in the park's many streams, rivers, and lakes.

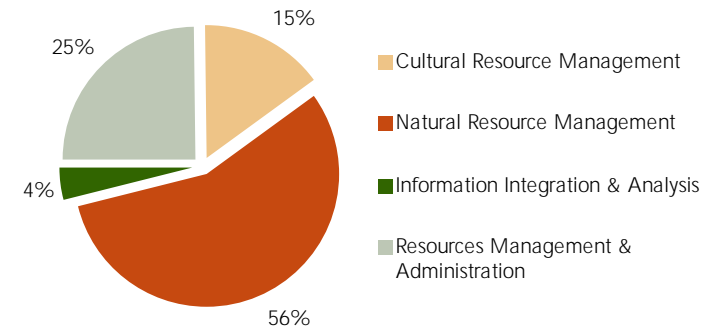
Resource Protection at Sleeping Bear Dunes National Lakeshore encompasses activities related to the management, preservation, and protection of a variety of natural communities and processes, historic structures, cultural landscapes, museum artifacts, and archeological sites. Despite the fact that conservation of natural and cultural resources is the primary focus of the NPS mission, the Resource Protection functional area comprised only 17% of the Lakeshore's total operating expenditures in FY2003. The deficit in this functional area is approximately \$618,000 or 40% of the park's total shortfall.

Natural Resource Management

The Lakeshore's perched dunes are part of the most extensive freshwater dune network in the world, vast enough to be visible from outer space. Coastal dunes support more endemic species than any other Great Lakes ecosystem. The Lakeshore supports other communities including mature hardwood forests, wetlands, rivers, and lakes. The program faces five primary challenges: protection of threatened and endangered species, mitigation of negative human impacts on ecosystems, water quality monitoring, control of invasive species, and ecological restoration of disturbed sites. The Natural Resources Management Division also manages the park's wildland fire program.

The tall bluffs and dune plateaus that give the Lakeshore its name are also its most recognized and most visited features. Especially vulnerable to human and natural disturbance, these landscapes present a management challenge for Lakeshore staff. Visitor traffic on the dunes and steep bluffs is causing severe erosion and accelerating sedimentation in small inland lakes. The dune plateaus are also home to rare plants including the federally threatened Pitcher's thistle. The openness of the dunes encourages more off-trail wandering than dense

Resource Protection
FY03 Expenditures by Program



Total Required		Available		Shortfall	
FTE	Funds	FTE	Funds	FTE	Funds
21.9	\$1,329,771	11.2	\$712,214	10.7	\$617,557

forests, making it especially hard to concentrate impacts from foot traffic to official trails. Visitor activity on beaches can also present hazards to the endangered Piping Plover (see sidebar). Increasing development and environmental impacts originating outside the Lakeshore boundaries pose a considerable threat to water quality in the Lakeshore's watersheds.

The Lakeshore is home to 908 terrestrial plant species. Invasive plants, especially garlic mustard, baby's breath, and spotted knapweed are a significant and increasing threat to this biodiversity. Fast growth and reproduction rates allow these plants to displace native species by reducing the available light, water, nutrients, and space. Park staff take special care to prevent the transfer of seeds and plant materials between the mainland and the islands. Natural Resources staff also complete restoration of former homesites by planting native vegetation after removal of all manmade structures and

The Lakeshore's perched dunes are part of the most extensive freshwater dune network in the world, vast enough to be visible from outer space.

materials, and monitoring areas to prevent the establishment of invasive plants. Such restoration is critical to increasing unbroken wildlife habitat and improving Lakeshore viewsheds. An additional \$429,000, including 7.9 FTE, would be needed to meet the natural resources standards for this program and its complementary Management and Administration program.

A critical component of this program is patrol by law enforcement rangers to prevent potential negative impacts, monitor sensitive areas to detect resource degradation, and provide informal education to visitors not reached by formal interpretive programs. An additional \$65,000 would be needed to adequately fulfill these duties.

Cultural Resource Management

The Lakeshore's historic maritime, agricultural, and recreational landscapes are of a size and quality unique to the Great Lakes and rare elsewhere on the U.S. Coastline. Because the significance of many of these resources was unknown during early planning efforts, until the late 1990s the Lakeshore did not direct a great deal of attention to this area. Currently one interpretive ranger devotes a portion of his time to managing the Lakeshore's large cultural resource inventory including 2,500 artifacts, 150 identified prehistoric sites, and over 300 museum archives. The Maintenance Division oversees 369 historic structures and 4,500 acres of cultural landscapes. Currently, eight sites are on the National Register of Historic Places. Funding shortfalls do not allow the staff to evaluate and nominate other structures to the National Register.

Recently, significant strides have been made in preserving the park's historic structures, many of which date back to 19th century agricultural and maritime communities. The park's efforts focus on stabilization to prevent further deterioration and, when funds are available,

additional rehabilitation for adaptive use. The Lakeshore has restored the US Lifesaving Station and Blacksmith Shop in Glen Haven for interpretive use.

In FY2003, the Cultural Resources Management program required \$193,000 to meet its operational standards. With a shortfall of 44%, the program needed an additional \$84,000 for its operations. The required 3.5 FTE includes 1.2 FTE of law enforcement rangers to patrol and protect the park's cultural assets. The Lakeshore has also identified a need for a cultural landscape specialist who can develop and implement preservation plans. Currently, a concerted effort is being made to work with partners to collaborate to protect the park's cultural resources.

Information Integration and Analysis

This program includes data collection, management, and analysis using Geographic Information System technology. With only one subject-to-furlough employee proficient in this technology, the program trains staff in collecting spatial data, collects new data and makes it available to park staff and outside agencies, and fulfills an increasing number of requests for map production. The program needs an additional \$39,000 including 0.4 FTE to fully accomplish these tasks.



The piping plover is one of the four federally threatened or endangered species that the Lakeshore protects.

Recovery of the Endangered Piping Plover

Piping Plover (*Charadrius melodus*) were once very common along Great Lakes beaches, with 30 nesting pairs once counted in two miles of beach. Hunting in the late 1800s greatly reduced the population, but the greatest threat today is human development and activity along the shoreline. Too much human disturbance may cause adults to abandon their nest. Unleashed dogs and people may crush eggs. In 1986 the Great Lakes population of the Piping Plover was listed as a federally endangered species. The Lakeshore began monitoring nests in 1993 to educate visitors, prevent abandonment, decrease human disturbance, and reduce natural predation by gulls and raccoons. Since that time, the number of nesting pairs in the lakeshore has increased from two to 19. In 2004 the lakeshore was home to 19 of the 54 nesting pairs in the entire Great Lakes region and supported successful fledging of 44% of these chicks. Resource managers hope that continued nest protection and public awareness will eventually enable delisting of the Piping Plover.

Visitor Experience and Enjoyment



Park rangers regularly patrol the Manitou Islands shoreline to ensure resource and visitor protection.

Visitors come to Sleeping Bear Dunes National Lakeshore for a variety of recreational activities including sightseeing, hiking, swimming, hunting, fishing, boating, and backpacking. Staff in the Visitor Experience and Enjoyment (VEE) functional area, primarily the Interpretation and Visitor Services and Ranger Divisions, strive to ensure that all visitors have a safe and enjoyable experience in the Lakeshore. VEE expenditures totaled just over \$1 million, or 25% of the Lakeshore's available operating budget in FY2003. The shortfall in this functional area is about \$407,000, or 26% of the park's total. Since providing for visitor enjoyment of natural, cultural, and historic resources is an integral part of the NPS mission, overcoming the VEE shortfall is a high priority for the Lakeshore.

Visitor Safety Services

This program is intended to protect Lakeshore visitors and employees. Specific elements include emergency medical services, search and rescue, structural fire, and law enforcement. The Lakeshore spent \$315,000 on this program in FY2003, but needed an additional \$73,000 to operate effectively, resulting in a 19% deficit. Despite maintaining mutual aid agreements with the sheriff's departments of Benzie and Leelanau counties, the Lakeshore cannot always provide adequate staffing levels in this program. These funds would enable extended EMS coverage during the peak season, train all rangers at the First Responder or EMT-B level, and achieve quicker emergency response.

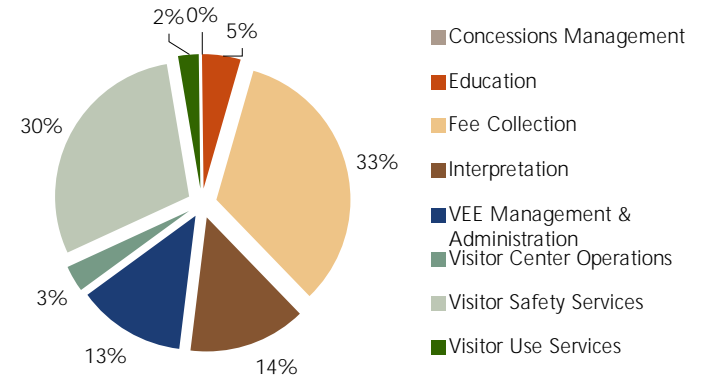


Rangers demonstrate firing the Lyle gun, formerly used by the US Lifesaving Service for offshore rescues.

Interpretation

For many visitors, a trip to a national park would not be complete without a campfire program, tour, or other ranger-led activity. In addition to increasing visitor enjoyment and understanding, interpretive programs encourage visitors to develop a personal stewardship ethic and broaden public support for preserving park

Visitor Experience & Enjoyment FY03 Expenditures by Program



Total Required		Available		Shortfall	
FTE	Funds	FTE	Funds	FTE	Funds
29.6	\$1,460,718	21.5	\$1,053,939	8.1	\$406,779

resources. Currently the Lakeshore offers at least two formal programs every day during the summer. Rangers provide roving interpretation at heavy visitor use areas including the Dune Climb, Overlooks 9 and 10 on the Scenic Drive, and the Glen Haven Historic District. The Interpretation program also coordinates development of exhibits and publication of media including an annual newspaper, 13 different trail maps, and 35 site bulletins. An additional \$35,000 would allow for more interpretive programs and development of exhibits to enhance visitor enjoyment and understanding of Lakeshore resources.

Education

Currently the Lakeshore offers programs for school groups only as time and staffing levels permit. The Lakeshore would like to develop a more comprehensive education program including curriculum-based programs, educational outreach, and teacher support. Resources and workshops

would help teachers use the park on their own when a ranger is not available. Establishment of this program will require significant planning including coordinating with educators to ensure their needs are met, development of materials that meet local and state standards, and creation of outreach materials. As such, this program faces a 75% shortfall including nearly 3.0 FTE and \$151,000.

Visitor Center Operations and Fee Collection

The Lakeshore operates one main visitor center in Empire, adjacent to headquarters and near the geographic center of the park. In addition to serving as the primary fee collection point, the visitor center houses interpretive displays, an auditorium with a 15-minute slideshow, and a bookshop operated by Eastern National. Visitor center staff provide orientation to over 137,000 visitors each year, distribute park and trail maps and site bulletins, help plan trips, and offer minimal interpretation. Fees are also collected at eight other popular sites including the Dune Climb, Scenic Drive, and campgrounds, but many visitors



Dozens of volunteers, including these farmers, demonstrate their trades, crafts, and a rural lifestyle at the annual Port Oneida Fair.

enjoy the Lakeshore without paying a fee. Numerous access points preclude cost-efficient collection of fees at other locations. The shortfall of \$65,000 and 1.2 FTE in these programs reflects the need for an interpretive ranger to staff the visitor center and improve visitor services. The Lakeshore also needs 0.4 FTE to begin collecting fees in Glen Haven and 0.25 FTE for an additional law enforcement ranger to transport collected fees.

Concessions and Visitor Use Services

The Lakeshore currently manages three concessions operations: Manitou Island Transit, a ferry and tour service to North and South Manitou Islands; a campground firewood concession; and soda and ice cream vending machines at the Dune Climb. Specific concessions activities include contract management, ongoing needs assessments, price increase reviews, and on-site performance and safety evaluations, and are typically performed by the Chief Ranger. This program also includes the issuance of Incidental Business Permits (IBPs) to individuals or groups entering the Lakeshore to operate a business such as a canoe and kayak livery. The Lakeshore issued 28 IBPs in FY2003. Due to the vacancy in the Chief Ranger position in that year, the Concessions program shows a deficit even though the program currently has sufficient operational funding.

The Visitor Use Services program includes the issuance of overnight camping permits and Special Use Permits (SUPs) for activities such as weddings, commercial filming, and the Port Oneida Fair. In recent years the Lakeshore has seen an increase in these requests, issuing 31 SUPs in FY2003. The 0.7 FTE shortfall in these programs represents the additional ranger staff necessary to ensure that special park uses do not have a negative impact on park resources or the experience of other visitors.

Port Oneida Fair

Where else can you travel through 3,500 acres of historic farmsteads on a horse and wagon to watch a team of oxen working the hayfields, a woman thrashing and spinning flax, a man riding an eight-foot tall bicycle, children doing laundry on a washboard, a blacksmith bending red hot iron, a fisherman mending his nets, and heirloom chickens strutting around the coop? The annual Port Oneida Fair is a two-day celebration of rural lifestyles, crafts, and traditions in a historic district listed on the National Register of Historic Places. Settled in 1852, Port Oneida is one of this country's best examples of an agricultural community at the turn of the 20th century. The 2003 fair attracted over 3,500 visitors and dozens of volunteers. Lacking sufficient funding for more regular coverage, the lakeshore relies on the fair to interpret this area's valuable resources. The fair also represents a good example of the lakeshore's increasing involvement with the local community and nonprofit organizations. Organizers hope that the Port Oneida Fair itself becomes tradition.

Facility Operations



Mowing the Lakeshore's 150 acres of grounds is one task in the Facility Operations functional area.

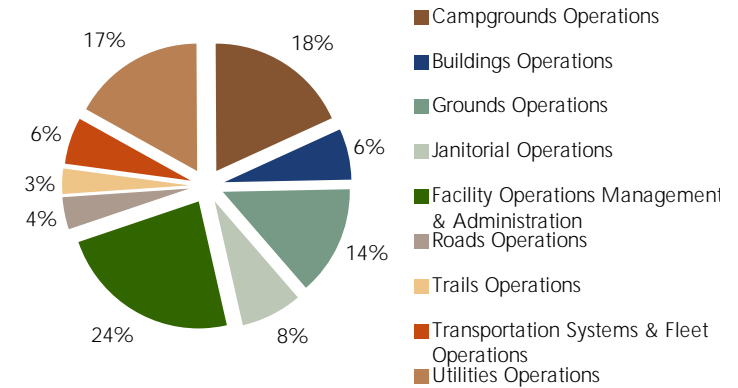
The Facility Operations functional area encompasses all activities needed to ensure park facilities are functioning smoothly and safely for visitors and employees. This includes the operation of 475 structures, nine campgrounds, 150 acres of grounds, 23 miles of roads, 105 miles of trails, 77 pieces of transportation equipment, 90 utilities systems, and janitorial duties. In FY2003 Facility Operations contributed to approximately 21% of total park expenditures. To fully fund the programs in this functional area, the Lakeshore needed \$1.1 million and 17.5 FTE, but experienced a shortfall of 15%, which represents 10% of the park's overall deficit. In the last three years, funding constraints have decreased the size of the operations and maintenance staff by over 20% while five new facilities have opened and administrative requirements have substantially increased. During that time, one position was moved to another division and two others downgraded, while all front-line supervisory positions were lapsed for protracted periods. An additional challenge for this functional area is the layout of the Lakeshore. Operations on the islands require transporting personnel and equipment over Lake Michigan on a regular basis which is both costly and time-consuming. Finally, seasonal visitation patterns cause heavy impacts on the facilities over a four-month period and minimal use throughout the rest of the year.

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Campground Operations

Campground Operations include overseeing and ensuring the effective operation of three frontcountry and six backcountry campgrounds with a total of 357 campsites. The majority of the campsites are open from May to October and ten sites remain open during winter. The campsites are usually 100% full from July 4th through Labor Day and receive high visitor satisfaction ratings. Operating the campgrounds includes landscaping, maintaining the grounds, cleaning the picnic areas, monitoring the septic and water systems, and routine

Facility Operations FY03 Expenditures by Program



Total Required		Available		Shortfall	
FTE	Funds	FTE	Funds	FTE	Funds
17.5	\$1,061,984	13.9	\$900,966	3.6	\$161,018

repairs. Janitorial services comprise the largest component of campground operations. The comfort stations at the Platte River Campgrounds, which are fully equipped with showers and flushing toilets, require additional upkeep.

In FY2003 this program identified needs of \$195,000 and 3.8 FTE to meet its operational standards and exhibited a shortfall of 16%. As a result of the \$31,000 deficit, supervisory positions have been lapsed and maintenance workers, who have had to take on additional responsibilities, are unable to clean and tend to the campgrounds regularly.

Utility Operations

This program encompasses all functions that provide

utility services throughout the Lakeshore. Personnel are responsible for ensuring that the electrical, plumbing, water, sewage, and HVAC systems operate properly for both visitors and staff. While the mainland is on the electric grid, the park generates its own electricity for the North and South Manitou Islands. A 20-kilowatt photovoltaic system generates most of the electrical power for North Manitou, while South Manitou is fueled by a diesel generator. The Lakeshore's utility systems also include 53 septic systems, which pump 95,000 gallons of sewage annually, and 20 operating water systems which process 2.4 million gallons of water per year.

Requiring a budget of \$180,000, the Utilities program experienced a 16% shortfall in FY2003, primarily due the fact that the Lakeshore had lapsed the electrician and plumber positions. The \$28,000 deficit translated to deferral of noncritical repairs and delayed response time to utility problems. The investment in battery banks as part of the photovoltaic system on South Manitou Island



The lakeshore staff maintains 105 miles of trails including bridges like this one.

is expected to reduce the utility cost for island operations in the future.

Trails Operations

The trails staff at the Lakeshore is responsible for the day-to-day operation of 105 miles of trail, 4 miles of sidewalk, one mile of boardwalk, 3 bridges and nearly 600 signs and wayside exhibits. The crew inspects and clears the entire trail system at the beginning of the busy season. Throughout the summer months, one employee is primarily responsible for mowing, clearing windfall, removing fallen trees, cleaning drainage structures, and seasonal sign changes. Certain trail areas, such as the boardwalk on the Scenic Drive, continually collect sand, accumulate moisture, and require frequent maintenance. In FY2003 the Trails Operations program experienced a 48% deficit requiring an additional \$25,000 to meet its operational standards. The Lakeshore lacked a tree worker, which meant that aside from limited trail mowing, much of the vegetation control and hazardous tree and vista management issues were left unaddressed.

Grounds and Janitorial Operations

Grounds Operations staff is responsible for landscaping and intensively maintaining over 150 acres of land. The Janitorial Operations program includes cleaning and garbage collection at public-use areas, administrative buildings, employee housing and nearly 40 vault/pit restrooms. Additional facilities have greatly increased these programs' responsibilities. In FY2003 these programs faced a total deficit of 10%; the Grounds Operations required an additional \$8,000 and the Janitorial Operations \$14,000 to carry out routine operational tasks. The lack of funding in Grounds prevents the staff from adequately maintaining cultural landscapes in the park (see sidebar). Janitorial operations lack the necessary resources to clean the restrooms and collect garbage on a daily basis.

Cultural Landscapes

The Lakeshore preserves a significant heritage in its multitude of cultural landscapes, some of which are testaments to America's early farming history. The Port Oneida Rural Historic District is perhaps the nation's most complete agricultural landscape, unique for its number of intact farmsteads, which reveal a small, closely-knit farming community founded in the early 1860s. The evolution of agriculture from subsistence to cash crop is illustrated here for discovery, education, and enjoyment. The Lakeshore manages approximately 4,500 acres of cultural landscapes, which include buildings, fields, open spaces, tree lines, fences, hedgerows, and orchards. In addition to agriculture, maritime and recreational landscapes are also represented. Current funding levels do not allow the staff to adequately maintain these landscapes. Funding requests have been prepared for their restoration and rehabilitation. The park is committed to preserving and protecting these assets for visitor enjoyment and appreciation.

Maintenance



Lakeshore staff is responsible for the upkeep of 475 structures, including 369 historic ones.

The Maintenance functional area at the Lakeshore is responsible for maintaining buildings, roads, trails, vehicles, and utilities. These activities involve recurring efforts to prolong the useful life of the park's facilities and assets, such as long-term rehabilitation and repair work, preventive maintenance, annual inspections, infrastructure upkeep, and equipment replacement. Maintenance activities comprised 18% of total park expenditures at a cost of \$740,000 and 8.8 FTE in FY2003. Although this area has a relatively small shortfall of 12% (only 7% of the parkwide total), it is important to note that the additional required funding of \$102,000 is needed to simply keep up with necessary daily repairs and is not sufficient to rectify the growing maintenance backlog. Reduced funding and lapsed positions in recent years have caused the division to fall behind in less routine cyclic maintenance, often leading to costly repairs over time.

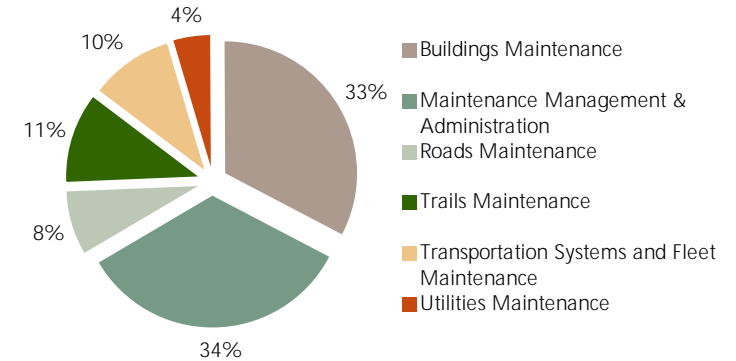
Buildings Maintenance

This program is responsible for the rehabilitation, restoration, and preservation of 475 structures, 369 of which are historic. Examples of cyclic maintenance and rehabilitative activities include roof repair and replacement, exterior painting, interior floor refinishing, septic repairs, and asbestos removal.

One of the Lakeshore's most unique features is its collection of historic farmsteads. However, these assets require expert knowledge and abundant resources to maintain. This division must continually both prevent further deterioration of these assets and stabilize them for future use. The buildings crew works closely with the historic architect to survey and monitor the integrity of these structures. Recently the Lakeshore has begun to complete condition assessments for each building in an effort to define deficiencies and to plan for stabilization needs.

Reduced funding and lapsed positions in recent years have caused the division to fall behind in less routine cyclic maintenance, often leading to costly repairs over time.

Maintenance FY03 Expenditures by Program



Total Required		Available		Shortfall	
FTE	Funds	FTE	Funds	FTE	Funds
10.6	\$842,449	8.8	\$740,361	1.8	\$102,088

Regular annual funding for building maintenance provides for only minimal emergency repairs. Project money from other sources fluctuates greatly over the years. Such variations prevent consistent maintenance and make it difficult to retain skilled workers. The 13% (\$37,000) shortfall in this program has led to an inability to inspect, repair, and regularly maintain the historic structures throughout the Lakeshore. The park has only one permanent full-time employee for buildings operations and maintenance programs. The staff is constantly dealing with emergency repairs at the expense of carrying out routine maintenance.

Transportation System and Fleet Maintenance

This program is responsible for the maintenance and repair of 17 leased and 46 NPS-owned vehicles, 4 boats, and a pool of maintenance equipment. The comprehensive leasing

agreement includes all fuel and maintenance costs associated with these vehicles. In an effort to reduce costs, most repairs on Lakeshore-owned vehicles are performed with in-house labor and expertise. One subject to furlough mechanic conducts routine inspections, preventive maintenance, and repairs. Adequately maintaining the water fleet is essential to Lakeshore operations during the summer season. The boats require frequent and costly care, most of which is handled by local marine shops. On the islands, the staff relies primarily on electric vehicles for transportation needs.

In FY2003 this program required a total of \$86,000 to function effectively. The shortfall of 12% (\$10,000) meant that the Lakeshore was unable to fund the mechanic position year-round, causing downtime and inefficiencies in operation. The off-season is the only time for the mechanic to inspect and maintain 77 pieces of equipment. In addition, many of the park's vehicles have outlived their useful life and no longer function properly. This has led to a



The photovoltaic system, including these solar panels on North Manitou Island, reduces the Lakeshore's utilities costs and offers environmental benefits.

collection of deteriorated vehicles that continually require costly repairs.

Maintenance Management and Administration

The Maintenance Management and Administration (M&A) program oversees the maintenance and upkeep of all facilities and assets throughout the Lakeshore. Activities include project planning, budgeting, scheduling work orders, tracking progress, ensuring regulatory compliance, providing supervision, and managing human resources. The staff is also responsible for preparing many of the contracts that the park awards and monitoring the progress of outsourced activities. Much of the Facility Manager's time is dedicated to developing a sustainable maintenance program to deal with a backlog of deteriorated structures. A great deal of effort has been devoted to successfully implementing the Facility Management Software System (FMSS), for which the park was awarded project money in 2003.

The Maintenance M&A program has faced great challenges recently due to many lapsed positions, resulting in supervisors having to take on additional responsibilities. In FY2003 the program exhibited a 6% deficit (requiring an additional \$17,000). The reduced staffing levels, combined with increased administrative requirements, have resulted in a reactive operation at the expense of planned programmatic efforts in cultural resource preservation and sustainability. The pressure of addressing the immediate facility operation requirements often means that long-term planning does not receive sufficient attention. Finally, recent budget fluctuations have led to inefficiencies and a backlog in maintenance requirements.

Sustainability Initiatives

The park has undertaken several sustainability initiatives to reduce costs, protect the environment, and enhance visitor experience. A 20-kilowatt photovoltaic system on North Manitou has greatly decreased the use of fuel. In FY2003 an inverter and battery banks were purchased for South Manitou Island to cut generator use in half. Future investments in solar panels will enable the park to harness the sun's energy for the islands' electrical needs. Transporting less fuel across Lake Michigan will improve air quality and reduce noise pollution and environmental hazards. Twenty pieces of equipment utilize bio-diesel, further reducing the lakeshore's reliance on conventional energy sources. Newly acquired dredging equipment allows the park to drastically reduce the quantity of sand dredged from the docks and move it in a sustainable manner. Island access is now maintained by small operations that are less costly and more conducive to natural shoreline movements. The park has made it a priority to continue its sustainability initiatives in the future.

Management and Administration



Partner groups support the Lakeshore's mission through donations including this telescope at the Lake Michigan overlook on the Pierce Stocking Scenic Drive.

The Lakeshore's management team consists of a Superintendent, Assistant Superintendent, five division chiefs, and an Environmental Protection Specialist. This team sets policy, establishes goals and objectives, oversees parkwide planning, and supervises other staff. Management is increasingly emphasizing developing relationships with organizations outside the park, including partners, special interest groups, and other stakeholders. In addition to these responsibilities, this functional area includes general administration duties, oversight of all communication systems, and the parkwide safety program. In FY2003 expenditures for these programs totaled nearly \$788,000. The shortfall of \$272,000 including 4.1 FTE represents the need for more dispatchers, the desire for greater community involvement, and the need for more park-wide planning efforts.

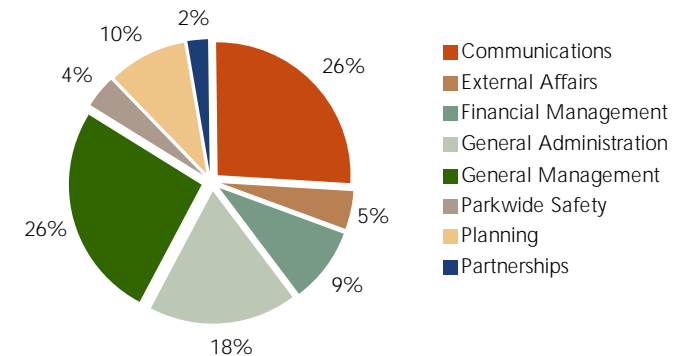
General Management, Financial Management, and General Administration

These programs provide administrative oversight for Lakeshore operations, manage human resources, and perform all financial planning activities. Together these programs required \$437,000 and 8 FTE to carry out daily operations. An overall shortfall of only \$20,000 (5%) is a testament to the Lakeshore's strong management team which has established processes to provide necessary administrative support for park operations.

The General Management program provides leadership and manages human resource issues in accordance with federal payroll laws, policies, and regulations. In FY2003 HR staff supported 46 permanent and 84 seasonal employees. The recent increase in the number of seasonal workers has required additional resources for recruitment and training.

The General Administration program oversees a variety of tasks that facilitate effective operations in the

Management & Administration FY03 Expenditures by Program



Total Required		Available		Shortfall	
FTE	Funds	FTE	Funds	FTE	Funds
16.1	\$1,060,198	12.0	\$787,802	4.1	\$272,396

Lakeshore, including contracting and procurement, managing supplies and property, filing, maintaining office equipment, tracking travel, processing mail, and managing 28 employee housing units. Since many administrative duties have been shifted from central offices to the Lakeshore, the demands on this program have increased. In addition, the Lakeshore provides administrative support to five other Midwest Region parks.

All budgeting activities and execution of funds at the Lakeshore are carried out by the Financial Management staff. This program oversees funding requests and ensures that park expenditures are consistent with the tenets of Federal Appropriation Law and governing NPS regulations. Other duties include continued reconciliation of official accounting data with local records, timely payments of bills and invoices, and auditing. Because almost 77 employees have purchasing power, auditing

Management is increasingly emphasizing developing relationships with organizations outside the park, including partners, special interest groups, and other stakeholders.

credit card invoices and internal control issues present a challenge for the program.

Communications

Three different divisions coordinate phone and information technology (IT) systems (Administration), dispatch (Ranger), and radio systems (Maintenance). The Communications program cost the Lakeshore \$205,000 in FY2003 with a deficit of \$38,000 including 1.6 FTE. The need for additional dispatchers to ensure ranger and visitor safety during law enforcement duties accounts for much of this shortfall. The Lakeshore foresees that hiring a full-time IT Specialist, instead of contracting out those services, will reduce costs and allow staff to devote more time to their core duties.

Partnerships and External Affairs

The Partnerships program includes oversight of established relationships and pursuit of new opportunities. Staff works closely with partner organizations to coordinate mutually beneficial activities and ensure that they comply with policies. The Lakeshore currently has partnerships with seven groups, which support a variety of programs through donations and volunteer hours based on a "wish list" of needs. Perhaps the most significant of these, the park's cooperating association, Eastern National (EN), assists the park's interpretive mission by offering educational materials and providing visitor orientation and information at its three sales outlets. In FY2003 EN donated 6% of its gross sales, nearly \$13,000, which was used for the annual park newspaper and other publications, Junior Ranger patches and workbooks, and Blacksmith Shop materials. The External Affairs program informs visitors and community members about events, incidents, and management decisions. Activities include writing articles and press releases, and participating in community meetings. The Lakeshore recognizes the need to cultivate and expand

partnerships and better engage the public in its planning and decision-making processes. To fully accomplish these goals, the Lakeshore needs an additional \$58,000.

Parkwide Safety

The purposes of this program are to provide safe, hazard-free environments for employees and visitors and to comply with mandated federal, state, and other safety and environmental regulations. Currently facilitated as a collateral duty of one employee, the program does not achieve optimal safety levels. Overcoming this program's shortfall of nearly \$50,000 would increase the attention devoted to this critical issue.

Planning

Currently one full-time employee devotes a portion of his time to coordinating project review with the interdisciplinary team. A deficit of \$108,000 demonstrates the need for greater emphasis on parkwide planning efforts, including wilderness, General Management planning and preparation of environmental assessments (see sidebar).



A backcountry management plan, addressing the impacts of the thousands of campers who visit North Manitou Island each summer, is an urgent need for the Lakeshore.

NEPA and Lakeshore Planning

The National Environmental Policy Act of 1969 (NEPA) requires all federal agencies to study the environmental impacts of, and alternatives to, proposed "major federal actions," and use that information along with public involvement to determine whether to proceed with the proposed action. In conjunction with the NPS Organic Act, NEPA attempts to define the balance between the use and preservation of Lakeshore resources. An in-depth study, known as an environmental assessment (EA), can cost as much as \$30,000. The Lakeshore's inability to fund EAs has limited its capacity to undertake projects that would improve resource management and visitor enjoyment. Its list of nearly 30 "backlogged" EAs would address many planning issues including former homesite restoration, backcountry management, the impacts of human traffic on fragile dune ecology, and management of the Port Oneida Rural Historic District. Devoting greater internal attention to park planning will allow the Lakeshore to reduce its EA deficit and undertake these much-needed projects.